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Information about configuring WWA towers

Joseph Palko (ITO, NWS Pittsburgh PA) wrote the below information about configuring WWA towers up for the NYC office to help them set up the CRS formatters in AWIPS. This document is a summary of the e-mail traffic between them.

Instruction for setting up the towers below is using dbaccess. The WWA setup GUI has some configuration ability for the towers, but until 5.2.1 or 5.2.2 (I think), not everything can be done in the GUI.

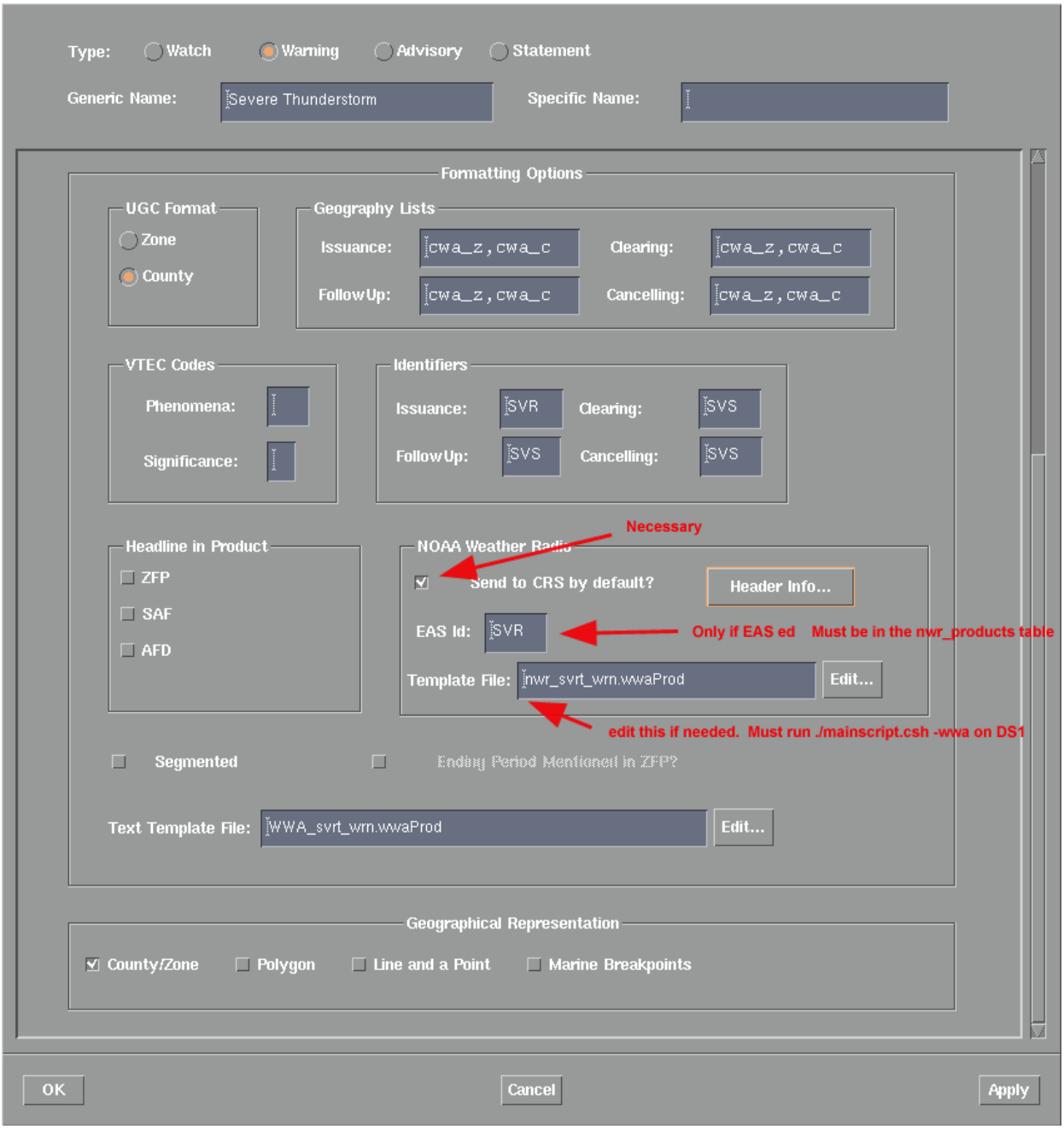
Also an important change came with respect to the CRS IDs in 5.1.2.1 where you have to make sure that new product names are in the CRS database. This product name change has no effect in setting up anything in AWIPS. It is ONLY the database on the CRS machine that needs to be changed.

Here are some of the first things you have to do. More details are below...

You will have to go in to the WWA setup GUI (see example below) and make sure you have the following set correctly in the NOAA Weather Radio Section

1. "Send to CRS by default?" checked off.
2. An EAS ID, if the product gets EASed. Also any product EASed or not must be in the nwr_product table (more details below)
3. You can edit the nwr template file if needed directly from the WWA setup GUI. The default ones are OK for a start.
4. You then have to make sure that ./mainScript.csh f -wwa (as fxa) has been run on the **ds1**. Yes ds1, because that is where the nwr formatters run.

WWA configuration GUI for SVR. You must do this for any product you want a NWR product created:

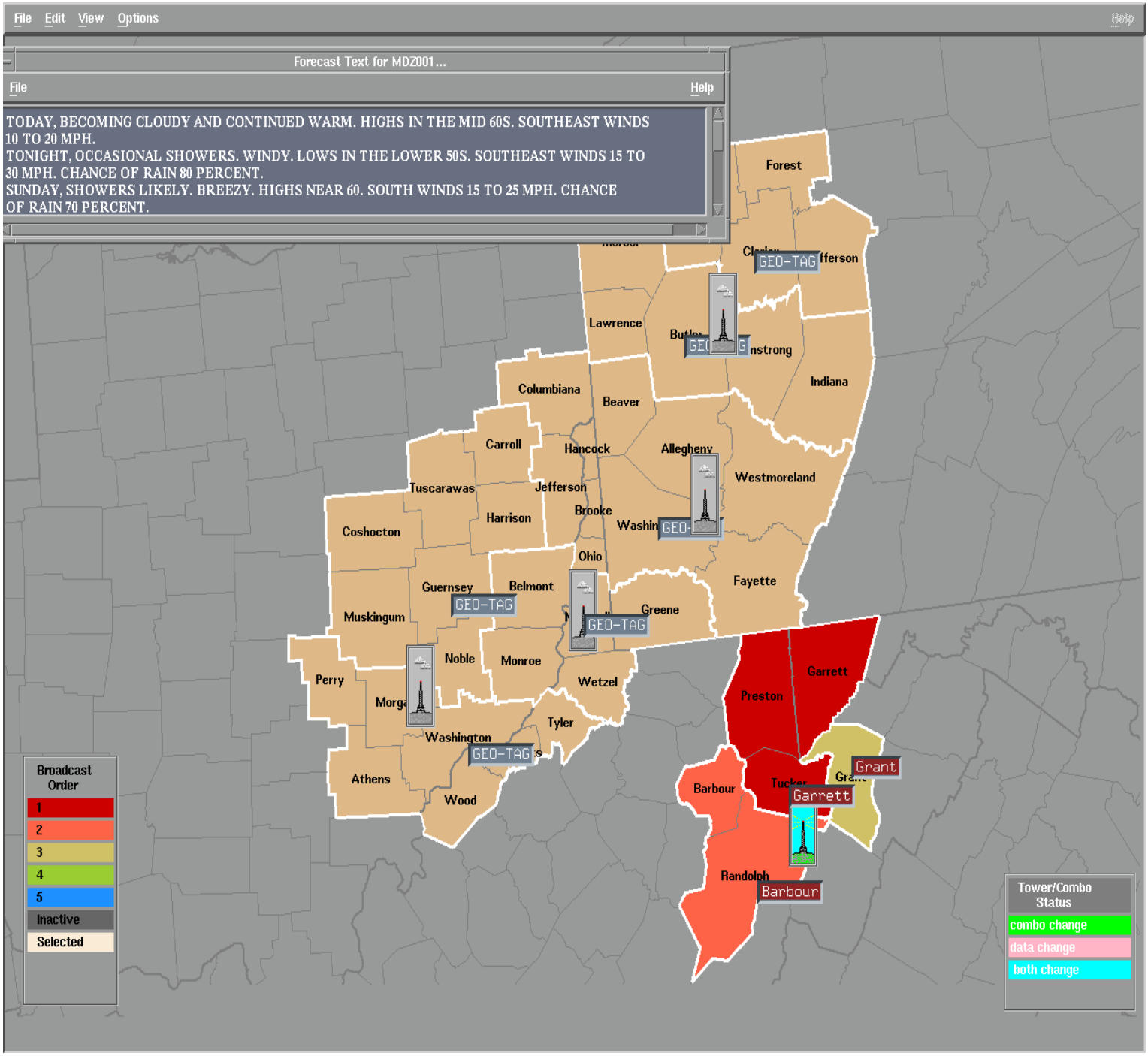


Summary: You now have to unload the *geography_groups* table and the *geography_directry* table as well as the *nwr_products* table, save a backup, then edit using dtpad or another editor and reload with all your counties for your towers. All the details are below.

Background information:
We limit our Zone forecasts (SAF) to just the routine listening area. Where our towers broadcast areas overlap, we broadcast only the official forecast from one tower only. For example on our SAF graphic below, our Tower 1 in Allegheny county reaches into Butler, Lawrence and Armstrong counties fairly well, but our tower number 2 is in Butler county and is even a better signal in those counties. So we only broadcast the official forecasts for Butler, Lawrence and Armstrong counties on Tower 2 and not on tower 1. This accomplishes 2 things. It keeps the broadcast cycle shorter, and also SAF allows the forecaster/HMT to combine zones if the forecasts are only slightly different. If we broadcast the forecast for Butler County on both tower 1 and 2, depending on how the forecaster combines the zones in SAF, they could have different forecasts for the same county on 2 different towers.

But In terms of Warnings Watches, the WSOM requires warnings to be broadcast on a tower if a there is a possibility of someone hearing it for that county. So if we issue a SVR, or a WSW for Butler county, we want it to go on both Tower 1 and tower 2.

How Warngen issued products show up in the NWR Browser? Any WWA issued product is tower specific, but warngen products are not. PITSVRPBZ will show up on any tower that needs it provided your towers are set up. Up until 5.1.2.1, even if CLE (our neighboring office) issued a warning for one of their counties, but it was covered by one of our transmitters, it will show up as a PITSVRPBZ in the NWR Browser, which is fine because it is the coding inside the CRS product that matters. BUT... In 5.1.2.1, this changed. If a surrounding office issued a warning for their CWA, but you broadcast it on your tower, it is supposed to show up with the issuing office identifier to make it easier for the CRS operator to keep track of them....for example CLESVRCLE.


File Edit View Options
Help
Forecast Text for MDZ001...
File
Help
TODAY, BECOMING CLOUDY AND CONTINUED WARM. HIGHS IN THE MID 60S. SOUTHEAST WINDS 10 TO 20 MPH.
TONIGHT, OCCASIONAL SHOWERS. WINDY. LOWS IN THE LOWER 50S. SOUTHEAST WINDS 15 TO 30 MPH. CHANCE OF RAIN 80 PERCENT.
SUNDAY, SHOWERS LIKELY. BREEZY. HIGHS NEAR 60. SOUTH WINDS 15 TO 25 MPH. CHANCE OF RAIN 70 PERCENT.
Forest
GEO-TAG
Lawrence
Columbiana
Beaver
Indiana
Carroll
Hancock
Allegheny
Westmoreland
Tuscarawas
Jefferson
Harrison
Brooke
Coshocton
Ohio
Fayette
Guernsey
Belmont
Muskingum
Greene
Noble
Monroe
Perry
Wetzel
Tyler
Washington
Athens
Wood
Preston
Garrett
Grant
Barbour
Tucker
Randolph
Broadcast Order
1
2
3
4
5
Inactive
Selected
Tower/Combo Status
combo change
data change
both change

Configuring Towers and unloading tables:

Even as MDL improves the config_IFPS GUI to make this easier to setup, I think there is nothing better than actually looking at the unloaded informix table yourself in a text editor. This way you may have a clearer understanding of what is going on.

Next comes checking out your tower lists. You may already have a default list that may not be too bad. Until WWA 5.2.1 comes out. It is best to do this in dbaccess, because the configuration GUI's in config_ifps (geography button) has some problems.

Now is the time that you want to gather some information about how you want to set up your towers. You want to get together before unloading the data base tables. If you have done dbaccess before great, otherwise directions for dbaccess are described later.

For each of your radios broadcast towers get a listing ready of all the county and zone codes for each tower.

WWA formaters also give you the ability to create 2 different tower lists for one tower. One for routine broadcasts (zones forecasts generated by the SAF program), and one for non-routine (watches, statements, and warnings)broadcasts. You may want to keep this in mind. If you decide to do this then make sure you have the listing of the county and zone codes for both.

Surrounding offices and how the formatters products work: If you have your tower listings set up right, WWA will automatically generate a CRS product whenever a watch, warning, advisory or statement is issued by you or a surrounding office that cover your NWR tower areas. It does it whether is was issued in Warngen or WWA. (*Note: If a surrounding office does not use WWA and uses XNOW for example, those statements, watches or advisories will not generate CRS message*) Warngen though "talks" to WWA via the AUX_INFO coding in the Warngen templates.

geography_groups table description What to look for when viewing and editing...
In this example PBZ has 4 towers set up.

nwr_twrs is what I called the routine towers

nwr_twrs|PBZ|OHC998|4|
nwr_twrs|PBZ|OHC999|3|
nwr_twrs|PBZ|PAC998|2|
nwr_twrs|PBZ|PAC999|1|

wwa_nwr_twrs is what I called the non routine towers.

wwa_nwr_twrs|PBZ|PAC899|1|
wwa_nwr_twrs|PBZ|PAC898|2|

wwa_nwr_twrs|PBZ|OHC899|3|
wwa_nwr_twrs|PBZ|OHC898|4|

nwr_sites are your office and surrounding offices that WWA is supposed to look for Short Fused warnings. SVR, TOR, FFW

nwr_sites|PBZ|CLE|2|
nwr_sites|PBZ|CTP|3|
nwr_sites|PBZ|LWX|4|
nwr_sites|PBZ|PBZ|1|
nwr_sites|PBZ|RLX|5|

Tower listing for what we call OHC998 our tower number 4

OHC998|PBZ|OHZ059|1|
OHC998|PBZ|WVZ003|2|
OHC998|PBZ|WVZ004|3|
OHC998|PBZ|OHZ050|4|
OHC998|PBZ|WVZ002|5|
OHC998|PBZ|WVZ012|6|
OHC998|PBZ|OHZ069|7|
OHC998|PBZ|WVZ001|8|
OHC998|PBZ|OHZ049|9|
OHC998|PBZ|OHZ040|10|
OHC998|PBZ|WVZ011|11|
OHC998|PBZ|OHC013|12|
OHC998|PBZ|OHC019|13|
OHC998|PBZ|OHC067|14|
OHC998|PBZ|OHC081|15|
OHC998|PBZ|OHC111|16|
OHC998|PBZ|WVC009|17|
OHC998|PBZ|WVC029|18|
OHC998|PBZ|WVC051|19|
OHC998|PBZ|WVC069|20|
OHC998|PBZ|WVC095|21|
OHC998|PBZ|WVC103|22|

Towers listing for what we call OHC999 our tower number 3

OHC999|PBZ|OHZ057|1|
OHC999|PBZ|OHZ058|2|
OHC999|PBZ|OHZ068|3|
OHC999|PBZ|OHZ067|4|
OHC999|PBZ|OHZ066|5|
OHC999|PBZ|OHZ048|6|
OHC999|PBZ|OHZ075|7|

OHC999|PBZ|OHZ076|8|
OHC999|PBZ|WVZ009|9|
OHC999|PBZ|WVZ010|10|
OHC999|PBZ|OHZ039|11|
OHC999|PBZ|OHC009|12|
OHC999|PBZ|OHC031|13|
OHC999|PBZ|OHC059|14|
OHC999|PBZ|OHC115|15|
OHC999|PBZ|OHC119|16|
OHC999|PBZ|OHC121|17|
OHC999|PBZ|OHC127|18|
OHC999|PBZ|OHC157|19|
OHC999|PBZ|OHC167|20|
OHC999|PBZ|WVC073|21|
OHC999|PBZ|WVC107|22|

Towers listing for what we call PAC998 our tower number 2

PAC998|PBZ|PAZ014|1|
PAC998|PBZ|PAZ007|2|
PAC998|PBZ|PAZ008|3|
PAC998|PBZ|PAZ015|4|
PAC998|PBZ|PAZ013|5|
PAC998|PBZ|PAZ022|6|
PAC998|PBZ|PAZ016|7|
PAC998|PBZ|PAZ009|8|
PAC998|PBZ|PAZ003|9|
PAC998|PBZ|PAC005|10|
PAC998|PBZ|PAC019|11|
PAC998|PBZ|PAC031|12|
PAC998|PBZ|PAC039|13|
PAC998|PBZ|PAC053|14|
PAC998|PBZ|PAC065|15|
PAC998|PBZ|PAC073|16|
PAC998|PBZ|PAC085|17|
PAC998|PBZ|PAC121|18|

Towers listing for what we call PAC999 our tower number 1

PAC999|PBZ|PAZ021|1|
PAC999|PBZ|PAZ030|2|
PAC999|PBZ|PAZ029|3|
PAC999|PBZ|PAZ020|4|
PAC999|PBZ|PAZ023|5|
PAC999|PBZ|PAZ032|6|

PAC999|PBZ|PAZ031|7|
PAC999|PBZ|OHZ041|8|
PAC999|PBZ|OHC029|9|
PAC999|PBZ|PAC003|10|
PAC999|PBZ|PAC007|11|
PAC999|PBZ|PAC059|12|
PAC999|PBZ|PAC063|13|
PAC999|PBZ|PAC125|14|
PAC999|PBZ|PAC129|15|
PAC999|PBZ|WVC051|16|

Towers listing for what we call OHC898 our alternate tower number 4

OHC898|PBZ|OHZ059|1|
OHC898|PBZ|WVZ003|2|
OHC898|PBZ|WVZ004|3|
OHC898|PBZ|OHZ050|4|
OHC898|PBZ|WVZ002|5|
OHC898|PBZ|WVZ012|6|
OHC898|PBZ|OHZ069|7|
OHC898|PBZ|WVZ001|8|
OHC898|PBZ|OHZ049|9|
OHC898|PBZ|OHZ040|10|
OHC898|PBZ|PAZ031|11|
OHC898|PBZ|OHZ068|12|
OHC898|PBZ|OHZ058|13|
OHC898|PBZ|OHZ039|14|
OHC898|PBZ|PAZ029|15|
OHC898|PBZ|WVZ011|16|
OHC898|PBZ|OHZ048|17|
OHC898|PBZ|OHZ057|18|
OHC898|PBZ|OHZ067|19|
OHC898|PBZ|OHZ075|20|
OHC898|PBZ|OHZ076|21|
OHC898|PBZ|WVZ009|22|
OHC898|PBZ|WVZ010|23|
OHC898|PBZ|WVZ019|24|
OHC898|PBZ|WVZ017|25|
OHC898|PBZ|OHC013|26|
OHC898|PBZ|OHC019|27|
OHC898|PBZ|OHC059|28|
OHC898|PBZ|OHC067|29|
OHC898|PBZ|OHC081|30|
OHC898|PBZ|OHC111|31|
OHC898|PBZ|OHC121|32|
OHC898|PBZ|OHC157|33|

OHC898|PBZ|PAC059|34|
OHC898|PBZ|PAC125|35|
OHC898|PBZ|WVC009|36|
OHC898|PBZ|WVC029|37|
OHC898|PBZ|WVC051|38|
OHC898|PBZ|WVC069|39|
OHC898|PBZ|WVC095|40|
OHC898|PBZ|WVC103|41|
OHC898|PBZ|OHC031|42|
OHC898|PBZ|OHC119|43|
OHC898|PBZ|OHC115|44|
OHC898|PBZ|OHC009|45|
OHC898|PBZ|OHC167|46|
OHC898|PBZ|WVC107|47|
OHC898|PBZ|WVC073|48|
OHC898|PBZ|WVC085|49|
OHC898|PBZ|WVC105|50|

Towers listing for what we call OHC899 our alternate tower number 3

OHC899|PBZ|OHZ057|1|
OHC899|PBZ|OHZ058|2|
OHC899|PBZ|OHZ068|3|
OHC899|PBZ|OHZ067|4|
OHC899|PBZ|OHZ066|5|
OHC899|PBZ|OHZ059|6|
OHC899|PBZ|OHZ048|7|
OHC899|PBZ|OHZ075|8|
OHC899|PBZ|OHZ076|9|
OHC899|PBZ|WVZ009|10|
OHC899|PBZ|WVZ010|11|
OHC899|PBZ|WVZ011|12|
OHC899|PBZ|OHZ069|13|
OHC899|PBZ|OHZ039|14|
OHC899|PBZ|OHZ040|15|
OHC899|PBZ|OHZ049|16|
OHC899|PBZ|OHZ050|17|
OHC899|PBZ|OHZ085|18|
OHC899|PBZ|OHZ086|19|
OHC899|PBZ|WVZ017|20|
OHC899|PBZ|WVZ019|21|
OHC899|PBZ|OHC009|22|
OHC899|PBZ|OHC013|23|
OHC899|PBZ|OHC031|24|
OHC899|PBZ|OHC059|25|
OHC899|PBZ|OHC111|26|

OHC899|PBZ|OHC115|27|
OHC899|PBZ|OHC119|28|
OHC899|PBZ|OHC121|29|
OHC899|PBZ|OHC127|30|
OHC899|PBZ|OHC157|31|
OHC899|PBZ|OHC167|32|
OHC899|PBZ|WVC073|33|
OHC899|PBZ|WVC095|34|
OHC899|PBZ|WVC107|35|
OHC899|PBZ|OHC019|36|
OHC899|PBZ|OHC067|37|
OHC899|PBZ|OHC081|38|
OHC899|PBZ|OHC105|39|
OHC899|PBZ|OHC053|40|
OHC899|PBZ|WVC105|41|
OHC899|PBZ|WVC085|42|

Towers listing for what we call PAC898 our alternate tower number 2

PAC898|PBZ|PAZ014|1|
PAC898|PBZ|PAZ007|2|
PAC898|PBZ|PAZ008|3|
PAC898|PBZ|PAZ015|4|
PAC898|PBZ|PAZ013|5|
PAC898|PBZ|PAZ022|6|
PAC898|PBZ|PAZ020|7|
PAC898|PBZ|PAZ016|8|
PAC898|PBZ|PAZ023|9|
PAC898|PBZ|PAZ009|10|
PAC898|PBZ|PAZ003|11|
PAC898|PBZ|PAC005|12|
PAC898|PBZ|PAC007|13|
PAC898|PBZ|PAC019|14|
PAC898|PBZ|PAC031|15|
PAC898|PBZ|PAC039|16|
PAC898|PBZ|PAC053|17|
PAC898|PBZ|PAC063|18|
PAC898|PBZ|PAC065|19|
PAC898|PBZ|PAC073|20|
PAC898|PBZ|PAC085|21|
PAC898|PBZ|PAC121|22|

Towers listing for what we call PAC899 our alternate tower number 1

PAC899|PBZ|PAZ021|1|
PAC899|PBZ|PAZ030|2|

PAC899|PBZ|PAZ029|3|
PAC899|PBZ|PAZ020|4|
PAC899|PBZ|PAZ014|5|
PAC899|PBZ|WVZ003|6|
PAC899|PBZ|WVZ002|7|
PAC899|PBZ|WVZ001|8|
PAC899|PBZ|PAZ022|9|
PAC899|PBZ|PAZ023|10|
PAC899|PBZ|PAZ032|11|
PAC899|PBZ|PAZ031|12|
PAC899|PBZ|WVZ004|13|
PAC899|PBZ|PAZ013|14|
PAC899|PBZ|OHZ041|15|
PAC899|PBZ|OHC029|16|
PAC899|PBZ|PAC003|17|
PAC899|PBZ|PAC005|18|
PAC899|PBZ|PAC007|19|
PAC899|PBZ|PAC019|20|
PAC899|PBZ|PAC051|21|
PAC899|PBZ|PAC059|22|
PAC899|PBZ|PAC063|23|
PAC899|PBZ|PAC073|24|
PAC899|PBZ|PAC125|25|
PAC899|PBZ|PAC129|26|
PAC899|PBZ|WVC009|27|
PAC899|PBZ|WVC029|28|
PAC899|PBZ|WVC051|29|
PAC899|PBZ|WVC069|30|

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geography_directry description.
This is where you describe the tower/names and Primary zone (Primary Zone is used for SAF. The Zone is either where the tower is located or largest nearby population zone. The Primary Zones is also used if you choose to broadcast only 1 extended forecast per tower in your routine forecasts. In addition, the towers' lat/lon is used for display purposes in SAF).

OHC999|T|/T996|HIGH HILL||EST5EDT|0||OHZ057|||39.84|81.769997|
PAC998|T|/T997|PARKER||EST5EDT|0||PAZ014|||41.139999|79.75|
OHC998|T|/T998|BRIDGEPORT||EST5EDT|0||OHZ059|||40.060001|80.75|
PAC999|T|/T999|PITTSBURGH||EST5EDT|0||PAZ021|||40.450001|79.959999|

OHC898|T|/T898|BRIDGEPORT||EST5EDT|0||OHZ059|||40.060001|80.75|
OHC899|T|/T896|HIGH HILL||EST5EDT|0||OHZ057|||39.84|81.769997|
PAC898|T|/T897|PARKER||EST5EDT|0||PAZ014|||41.139999|79.75|
PAC899|T|/T899|PITTSBURGH||EST5EDT|0||PAZ021|||40.450001|79.959999|

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nwr_products table

Check the *nwr_products* table to make sure that any product you want a CRS messages generated for is in there. It usually is, but if you are creating something new, you definitely want to check to be sure it is there.

Note the columns First A = Active, D= Delete, I = Interrupt, A=Tone alert , N= no alert

```
NOW|T_ENG| | |A|D| | |N| | |||||
TOR|T_ENG| | |A|D| |I|A| | |||||
FFW|T_ENG| | |A|D| |I|A| | |||||
SVR|T_ENG| | |A|D| |I|A| | |||||
```

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5. to start dbaccess...
As user ifps while logged on to the primary ds server execute the following commands:

```
. ./localbin/ifps-ccc.env          (where ccc is you station ID)
dbaccess
```

1) **Unload the current *geography_groups* table, *geography_directry* table and *nwr_products* table**

In dbaccess :

[Q]uery Language

Note: using the arrow keys, select database ifps_ccc, where ccc is your WFO id

[N]ew
unload to "/tmp/geography_groups.ccc.unl" select * from
geography_groups;
<esc
[R]un
[E]xit, twice

Then repeat for *geography_directry*

[Q]uery Language

Note: using the arrow keys, select database ifps_ccc, where ccc is
your WFO id

[N]ew
unload to "/tmp/geography_directry.ccc.unl" select * from geography_directry;
<esc

[R]un
[E]xit, twice

Then repeat for *nwr_products*[Q]uery Language

Note: using the arrow keys, select database ifps_ccc, where ccc is your WFO id

[N]ew
unload to "/tmp/geography_directry.ccc.unl" select * from geography_directry;
<esc
[R]un
[E]xit, twice

2) **View/Edit the 3 files**.

cd /tmp
cp geography_groups.ccc.unl geography_groups.orig (this just saves off a copy in case you need to restore the original file)
cp geography_directry.ccc.unl geography_directry.orig
cp nwr_products.ccc.unl nwr_products.orig
setenv DISPLAY ws#:0.0

/usr/dt/bin/dtpad geography_groups.ccc.unl

Note: New entries should be created as exactly the same format as the others each ended with a vertical bar ("|")

(note each entry should be on *one* line...

Make sure you don't put any blank lines in the file, especially at the end.

select Save from the File menu.
select Exit from the File menu.

repeat viewing and editing for
geography_directry.ccc.unl
nwr_products.ccc.unl

3) **Deleteing current tables and Loading the new tables back into the database.**
Example below shows how to do it for *geography_groups* It must be repeated for both *geography_directry* and *nwr_products* if you made changes In dbaccess :

[Q]uery Language

Note: using the arrow keys, select database wwa_ifps, where ccc is your WFO id

[N]ew
delete from geography_groups;
<esc
[R]un

[N]ew
load from "/tmp/geography_groups.ccc.unl" insert into
geography_groups;
<esc
[R]un

[E]xit, twice

Repeat for both geography_directry and nwr_products if you made changes

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